

AMENDMENTS TO THE DRAWINGS

The attached replacement sheets of drawings include changes to Figures 2, 3A, 3B and 5. These replacement sheets, which include Figures 2, 3A, 3B and 5, replace the original sheets including Figures 2, 3A, 3B and 5.

Attachment: Replacement Sheets

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-14 are pending in this application. Claims 1, 5, and 8-12 are amended, and claims 13 and 14 are newly added by this amendment. No claims are cancelled.

Applicant notes with appreciation the Examiner's indication that the priority documents have been acknowledged and received by the United States Patent and Trademark Office and that the references filed in the Information Disclosure Statement filed July 22, 2004 have been considered.

DRAWINGS

The drawings were objected to under 37 C.F.R. § 1.83(a) as not showing each and every feature of the invention specified in the claims. More specifically, the Examiner states on page 2, lines 5 and 6 that "[t]here is only one end flange shown and it is unclear how the bobbin would be formed having two end flanges." However, Applicant respectfully submits that at least Figure 5 illustrates two end flanges each end flange is labeled by reference numeral 3 and the two end flanges are connected via the base of the cylinder 2.

Therefore, Applicant respectfully requests that this objection to the drawings under 37 C.F.R. § 1.83(a) be withdrawn.

The drawings were also objected to because the cross-section of the bobbin showing the material as plastic is incorrect since the cross-section illustrated in the originally filed figures corresponds to the cross-section of metal shown in MPEP § 608.02. In light of this objection, the replacement sheets including Figures 2, 3A, 3B, and 5 are submitted herewith illustrating that the bobbin is made of plastic.

Therefore, Applicant respectfully requests that this objection also be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. § 112

Claims 1-12 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. Applicant respectfully traverses this rejection for the reasons detailed below.

The Action mailed May 3, 2005 indicates on page 3, lines 8-11, that it is unclear in regard to claims 1 and 8 whether the U-shaped channel is a separate element or is formed from the cylinder and the circumferential end flanges. In light of this rejection, claims 1 and 8 have been amended to further clarify the claimed invention. Applicant believes that it is now clear from amended claims 1 and 8 that the U-shaped channel is bent to form the cylinder.

For example, amended claim 8 recites a method of manufacturing a bobbin of plastic including “injection moulding a one piece U-shaped channel having circumferential end flanges; bending the U-shaped channel to form a cylinder with end flanges; and connecting the ends of the U-shaped channel.” Further, as illustrated in the example embodiment of Figure 2, the U-shaped channel is shown as walls 11 connected by the base 10 of the U-shaped channel.

With respect to claim 1, the Examiner indicated in the May 3, 2005 Office Action that the word “essentially” on line 5 renders the claim indefinite. However, Applicant respectfully notes that the term “essentially” does not automatically render the claim indefinite as evidenced by MPEP § 2173.05(b) and *In re Marosi*, 710 F.2d 799, 218 USPQ 289 (CCPA 1983), wherein the court ruled that the phrase “a silicone dioxide source that is essentially free of alkaline metal” was held to be definite because the specification contained guidelines and examples that were considered sufficient to enable a person of ordinary skill in

the art to adequately determine the definition of the word “essentially.” The court further observed that it would be impractical to require the Applicants to specify a particular number as a cut off between their invention and the prior art.

Applicant respectfully submits that the use of the word “essentially” in amended claim 1 to describe the radial flange elements is permissible at least because Figure 4 illustrates what is meant by “essentially” radial flange elements, and it would be impractical to require the Applicant to further define the orientation of the radial flange elements or to unnecessarily limit the flange elements by reciting perfectly radial flange elements.

Therefore, Applicant respectfully submits that the use of the word “essentially” is permissible in this instance.

In response to the Examiner’s indication that the feature of dependent claim 5 reciting “the grooves in the inner circumferential surface” lacks sufficient antecedent basis, claim 5 is amended to depend from claim 4 which provides sufficient antecedent basis for the feature “the plurality of axial grooves in the inner circumferential surface of the cylinder.”

Therefore, Applicant respectfully submits that amended dependent claim 5 provides proper antecedent basis for all features recited in the claim.

In light of the above-discussion and amendments, Applicant respectfully requests that the rejection of claims 1-12 under 35 U.S.C. § 112, second paragraph, be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. § 103

Claims 1-6 and 8-12 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Balke (U.S. Patent No. 1,437,954) in view of Orange (U.S. Patent No. 5,513,819). The Applicant respectfully traverses this rejection for at least the reasons detailed below.

Amended claim 1 recites a bobbin including a cylinder “having a one piece injection moulded U-shaped channel.” Similarly, amended claim 8 recites a method of manufacturing

a bobbin of plastic including “injection moulding a one piece U-shaped channel having circumferential end flanges; bending the U-shaped channel to form a cylinder with end flanges; and connecting the ends of the U-shaped channel.”

The cited references of Balke and Orange describe bobbins or reels made of a flat piece of material, such as paper or fluted plastic, respectively, which are punched, folded, and thereafter bent to form a cylinder. Applicant respectfully submits that neither Balke nor Orange, either alone or in any proper combination, disclose, teach, or suggest a bobbin of plastic including a cylinder “having a one piece injection moulded U-shaped channel,” as recited in amended claim 1, or a method of manufacturing a bobbin of plastic including “injection moulding a one piece U-shaped channel having circumferential end flanges,” as recited in amended claim 8. With respect to the above-identified features of amended claims 1 and 8, the Examiner simply makes the conclusory statement that “[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to form a one-piece element made of plastic by means of injection molding since it was known in the art that injection molding is a widely used manufacturing process.”¹

Applicant respectfully emphasizes that injection moulding, as recited in the claimed invention and making reels out of flat pieces of material, as described in Balke and Orange, are completely different manufacturing techniques. It is hence not reasonable to believe that a person skilled in one technique is also skilled in the other. A person with ordinary skills in injection moulding would not use teachings describing manufacturing a bobbin or reel beginning with a flat piece of material like Balke and Orange and *vice versa*. One problem when injection moulding is to construct shapes which are injection mouldable and that problem is not solved by the teachings in Balke and Orange.

¹ Office Action mailed May 3, 2005, page 4, lines 1-14.

Applicant respectfully notes that MPEP § 2144.03(A) states “it is never appropriate to rely solely on ‘common knowledge’ in the art without evidentiary support in the record, as the principle evidence upon which a rejection was based.” *In re Zurko*, 258 F.3d 1379, 1385, 59 U.S.P.Q.2d 1693, 1697 (Fed. Cir. 2001). (“The Board cannot simply reach conclusions based on its own understanding or experience--or on its assessment of what would be basic knowledge or common sense. Rather, the board must point to some concrete evidence in the record in support of these findings.”). Further, MPEP § 2144.03(B) states “[o]rdinarily there must be some form of evidence in the record to support an assertion of common knowledge.” *Zurko*, 258 F.3d at 1386, 59 U.S.P.Q.2d at 1697 (holding that general conclusions concerning what is “basic knowledge” or “common sense” to one of ordinary skill in the arts without specific factual findings and some concrete evidence in the record to support these findings will not support an obviousness rejection).

Therefore, Applicant respectfully submits that if this rejection is maintained that some concrete evidence in the record be provided in support of the above block-quoted conclusory statement.

Further, with respect to the combination of Balke and Orange the Examiner states “[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the bobbin of Balke to be made of plastic as suggested by Orange, to make the bobbin available for reuse (Col. 2, line 39).”

However, Applicant respectfully submits that this reason for combining the references is insufficient because the cited portion (Col. 2, line 39) merely states one object of Orange is to “provide a reel that can be knocked down flat for future return/reuse,” and there is no indication in Balke that the paper or cardboard reel of Balke could not be broken down for future return/reuse. Therefore, Applicant respectfully submits that the record is lacking a proper motivation for combining the cited references of Balke and Orange.

Therefore, in light of the above-discussed deficiencies in the cited references and a lack of motivation for combining the cited references, Applicant respectfully requests that the rejections to independent claims 1 and 8 be withdrawn.

Dependent claims 2-7 and 9-12 depend from independent claims 1 and 8, respectively, and therefore include the features of independent claims 1 and 8. Therefore, Applicant respectfully submits that dependent claims 2-7 and 9-12 are patentably distinguished over the cited references for at least the same reasons discussed above with respect to amended independent claims 1 and 8.

Therefore, in light of the above deficiencies of the cited references and lack of motivation for combining the cited references, Applicant respectfully requests that the rejection of claims 1-6 and 8-12 under 35 U.S.C. § 103(a) be withdrawn.

Claim 7 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Balke as modified by Orange, and further in view of Koskelainen (U.S. Patent No. 6,021,974). The Applicant respectfully traverses this rejection for at least the reasons detailed below.

Koskelainen describes a coiling system for coiling and uncoiling of an elongated flexible element.² However, Koskelainen fails to cure the deficiencies of Balke and Orange as discussed above with respect to the features of independent claims 1 and 8. Dependent claim 7 includes the features of independent claim 1, and therefore the Applicant respectfully submits that dependent claim 7 is allowable over the cited references for at least the same reason that independent claim 1 is allowable over the references of Balke and Orange.

Therefore, Applicant respectfully requests that the rejection of claim 7 under 35 U.S.C. § 103(a) as unpatentable over Balke, as modified by Orange, and further in view of Koskelainen, be withdrawn.

² Koskelainen, Abstract.

NEW CLAIMS

New claims 13 and 14 have been added in an effort to provide further protection for the Applicant's invention. New claim 13 depends from claim 1 and recites "a radial inner end of each essentially radial flange element has a slightly curved surface, the slightly curved surface forms a portion of an inner circumference of the cylinder," and new claim 14 recites a bobbin of plastic including end flanges, "wherein each end flange includes a plurality of spaced-apart, essentially radial flange elements having a slightly curved radially inner surface forming an inner circumference of the cylinder." The Applicant respectfully submits that new claims 13 and 14 are patentably distinguished over the cited references at least because of the above-identified features. Accordingly, claims 13 and 14 are believed to be in condition for formal allowance.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1-14 in connection with the present application is earnestly solicited.

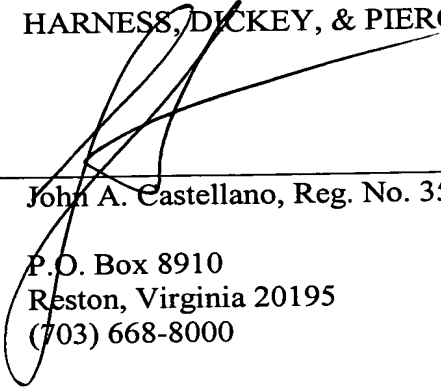
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John A. Castellano at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By



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